REMARKS

The abstract of the disclosure is objected to because it exceeds the required range of 50 to 150 words.

Claims 2-7, 9-11, 13-15 and 17-20 are objected to because of informalities.

Claims 1-11 and 16-20 are rejected under 35 U.S.C. 102(b).

Elections/Restriction

Applicants acknowledge election of GROUP I, claims 1-11 and 16-20, and withdraw claims 12-15.

Specification

The Abstract of the Specification is amended to have its number of words within the range of 50 to 150.

Claim Objections

Claims 2-7, 9-11, 13-15 and 17-20 are amended to correctly comply with proper antecedent basis.

New Claims

New claims 21 and 22 find support, among other locations, in the Specification, page 8, final paragraph.

Claim Rejections - 35 USC § 102

Claims 1-11 and 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Wrinn (U.S. Patent No. 4,746,855).

Applicants respectfully traverse the rejections.

Claim 1 recites, among other things, a pattern memory for storing the input signal patterns and the output signal patterns.

Wrinn does not show or teach any memory, let alone a pattern memory that stores input and output signal pattern.

Wrinn shows, in FIG. 1, a test controller 22, channel driver/detectors 16, a relay controller 20, a relay multiplexer 10, and a PCB under test 13. None of these elements have a memory or storage capacity. Wrinn does not teach a pattern memory in the test controller 22,

as asserted by the Examiner. Wrinn explains that the test controller 22 provides test control signals over bus 24 to operate channel drivers 26 to provide test signal inputs (col. 4, lines 25-27). One cannot assume that the test controller 22 stores, or has a memory to store, these test signal inputs. Wrinn continues to explain that test controller 22 is provided with test outputs to compare with expected test results (col. 4, lines 30-32). Again, one cannot assume that these expected test results, or any other signals or values, are stored in the test controller 22. Wrinn, therefore, fails to teach or show each and every element recited in claim 1, so the applicants request withdrawal of the rejection.

Claims 2-7 depend from claim 1 and inherently include all of the limitations of their base claims. As discussed above, the prior art does not teach the limitations of the base claim much less the further embodiments of the dependent claims. Therefore, these claims are allowable for their dependency and on their own merits. Allowance of these claims is requested.

Claim 8 recites, among other things, applying input signal patterns from an input pattern memory to the single pin, and comparing data output from output pins of the semiconductor device via the single pin with output signal patterns output from an output pattern memory.

As discussed above, regarding claim 1, Wrinn does not teach or show any memory, let alone a pattern memory. Wrinn, therefore, fails to teach or show each and every element recited in claim 8, so the applicants request withdrawal of the rejection.

Claims 9-11 depend from claim 8 and inherently include all of the limitations of their base claims. As discussed above, the prior art does not teach the limitations of the base claim much less the further embodiments of the dependent claims. Therefore, these claims are allowable for their dependency and on their own merits. Allowance of these claims is requested.

Claim 16 has been amended to recite applying an input signal pattern to the pin of the semiconductor device; comparing data output from the semiconductor device with a predetermined output signal pattern; and storing the predetermined output signal pattern responsive to the control signal. No new matter has been added. Support for this amendment can be found, among other locations, in the Specification, page 8, last paragraph.

As discussed above, regarding claim 1, Wrinn does not teach or show any memory, which would be needed to store the predetermined output signal pattern, as in claim 16. Wrinn, therefore, fails to teach or show each and every element recited in claim 16, so the applicants request withdrawal of the rejection.

Claims 17-22 depend from claim 16 and inherently include all of the limitations of their base claims. As discussed above, the prior art does not teach the limitations of the base claim much less the further embodiments of the dependent claims. Therefore, these claims are allowable for their dependency and on their own merits. Allowance of these claims is requested.

Conclusion

For the foregoing reasons, reconsideration and allowance of claims 1-11 and 16-22 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.

Joseph S. Makuch Reg. No. 39,286

MARGER JOHNSON & McCOLLOM, P.C. 210 SW Morrison Street, Suite 400 Portland, OR 97204 503-222-3613 Customer No. 20575

I hereby certify that this correspondence is being transmitted to the U.S. Patent and Trademark Office via facsimile number (571) 273-8300 on October 27, 2005.

Li Mei Vermilya